

**IN THE CLAIMS:**

1. (Previously presented) A composition of matter, which comprises in admixture; N-acetylcysteine, N-acetyl-d-glucosamine and vitamin C whereby the amount of vitamin C is in an amount of at least 1000 mg. or greater to facilitate the absorption of N-acetylcysteine across the cellular membrane; and, a pharmaceutically acceptable carrier for oral administration.

6. (Previously presented) The systemic administration of a pharmaceutically effective amount of the composition according to claim 1 to a mammal suffering from low glutathione levels, to stimulate the natural production of glutathione in the biologically active cells of the mammal.

22. (Previously presented) The systemic administration according to claim 19, wherein the disease is a member of the group consisting of pulmonary oxygen toxicity, adult respiratory distress syndrome, broncopulmonary dysplasia, sepsis syndrome, Parkinson's disease, encephalitis, endotoxemia, anoxia induced neuronal damage, ischemic reperfusion injury, inflammatory diseases, systemic lupus erythematosus, myocardial infarction, stroke, traumatic hemorrhage, spinal cord trauma, Crohn's disease, rheumatoid arthritis, diabetes, cataract formation, uvetis, emphysema, gastric ulcers, oxygen toxicity, neoplasia, undesired cell apoptosis, radiation sickness.

23. (Previously presented) The systemic administration according to claim 20, wherein the disease is a member of the group consisting of pulmonary oxygen toxicity, adult respiratory distress syndrome, broncopulmonary dysplasia, sepsis syndrome, Parkinson's disease, encephalitis, endotoxemia, anoxia induced neuronal damage, ischemic reperfusion injury, inflammatory diseases, systemic lupus erythematosus, myocardial infarction, stroke, traumatic hemorrhage, spinal cord trauma, Crohn's disease, rheumatoid arthritis, diabetes, cataract

formation, uvetis, emphysema, gastric ulcers, oxygen toxicity, neoplasia, undesired cell apoptosis, radiation sickness.

24. (Previously presented) The systemic administration according to claim 21, wherein the disease is a member of the group consisting of pulmonary oxygen toxicity, adult respiratory distress syndrome, broncopulmonary dysplasia, sepsis syndrome, Parkinson's disease, encephalitis, endotoxemia, anoxia induced neuronal damage, ischemic reperfusion injury, inflammatory diseases, systemic lupus erythematosus, myocardial infarction, stroke, traumatic hemorrhage, spinal cord trauma, Crohn's disease, rheumatoid arthritis, diabetes, cataract formation, uvetis, emphysema, gastric ulcers, oxygen toxicity, neoplasia, undesired cell apoptosis, radiation sickness.

27. (Previously presented) The composition of claim 26, wherein said probiotic is a composition of "healthy bacteria" containing one or more of said healthy bacteria selected from the group comprising bifidobacterium longum, bifidobacterium infantis, lactobacillus acidophilus, lactobacillus casei, lactobacillus rhamnosus, saccharomyces boulardi, propionibacteria and enterococci.

29. (Cancelled).

30. (Cancelled)

31. (Cancelled).

32. (Cancelled)

33. (Cancelled).

34. (Previously presented) A method of promoting the biosynthesis of mucosal glycoproteins and/or facilitating the absorption of N-acetylcysteine into a gastrointestinal tract of a mammal, comprising the step of administering the composition of claim 1.